

Abstract

An antenna intended to be used in a small-sized and flat radio device, and to a radio device which has an antenna according to the invention. The base element of the antenna is a monopole-type conductor (110) internal to the device. This conductor may be designed such that the harmonic nearest to the fundamental resonating frequency can be utilized in providing an upper operating band. In addition to the base element the antenna structure comprises a parasitic element (120) which functions as both an auxiliary radiator and antenna matching element. Matching is optimized using an inductive component (125) which connects the parasitic element to signal ground. The antenna gain achieved is considerably higher than that of known antenna structures occupying the same space (h), and the antenna matching is improved, compared to known internal monopole antennas.

Fig. 1